

5 **Relationship of a Specific Metabolite to Insulin Resistance**

Abstract

10 Provided are methods and reagents for reducing ketone levels (for example, β -hydroxybutyrate) in skeletal muscle. Also provided are methods and reagents for treating insulin resistant states, such as diabetes. Further provided are screening methods for identifying compounds to reduce skeletal muscle ketone levels and/or to treat insulin resistance, for example, insulin resistance associated with diabetes.

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